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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,711	08/06/2001	Michael Nahum	109942	8769
25944	7590	03/07/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			BHATNAGAR, ANAND P	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,711

Applicant(s)

NAHUM, MICHAEL

Examiner

Anand Bhatnagar

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/15/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-26 is/are allowed.
- 6) ☒ Claim(s) 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-29 in the reply filed on 10/15/05 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without serious burden. This is not found persuasive because as explained in the restriction, filed on 09/22/04, that two groups exist wherein Group I (claims 1-27), a combination group, and Group II (claims 28 and 29), a subcombination group since the combination does not require particulars of the subcombination. Specifically the features of "the signal generating and processing circuitry element analyzes values of at least some of the first set of correlation function value points to determine at least a smear magnitude for the analyzed smeared one of the first and second images" and "the signal generating and processing circuitry element, based on the first and second images, obtains correlation function values for at least one of a second set of correlation function value points, the correlation function value points of the second set selected based on the determined at least smear magnitude, the second set of correlation function value points distributed within at least one potential peak portion of the correlation function of the first image relative to the second image" are not required by the combination. The requirement is still deemed proper and is therefore made FINAL.

## **DETAILED ACTION**

### ***Specification***

2. The attempt to incorporate subject matter into this application by reference to application 09/584,264, 09/731,671, and 09/860,636 (pages 2 and 4 of the specifications) is improper because only U.S. patents and allowed applications, with issue fee paid, can be incorporated by reference and not application numbers. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

3. Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A "carrier wave encoded to transmit" is non-statutory subject matter because this is abstract idea and does not produce a "useful, concrete and tangible result" until it is couple to a physical structure.

### ***Allowable Subject Matter***

4. Claims 1-26 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art of Iwaki et al. (U.S. patent 5,619,596) discloses to perform image correlation of an input image compared to a reference image and determining the correlation ratios. Takemori et al. (U.S. patent 4,967,093) teaches to perform image correlation on displaced speckle

images to determine the amount of deformation of an object. Takemori et al. further discloses to perform auto-correlation to determine object deformation. Neither Iwaki et al. nor Takemori et al. teaches, regarding claims 1 and 26, the feature of "comparing one of the at least one smeared image to itself at a first plurality of offset positions, the first plurality of offset positions corresponding to a first set of correlation function value points of an auto-correlation function that are distributed around a zero-offset position of that smeared image relative to itself; analyzing values of the plurality of correlation function value points of the first set to identify at least one width value for a peak portion of the auto-correlation function for the smeared image," that in combination with the other respective claim limitations.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

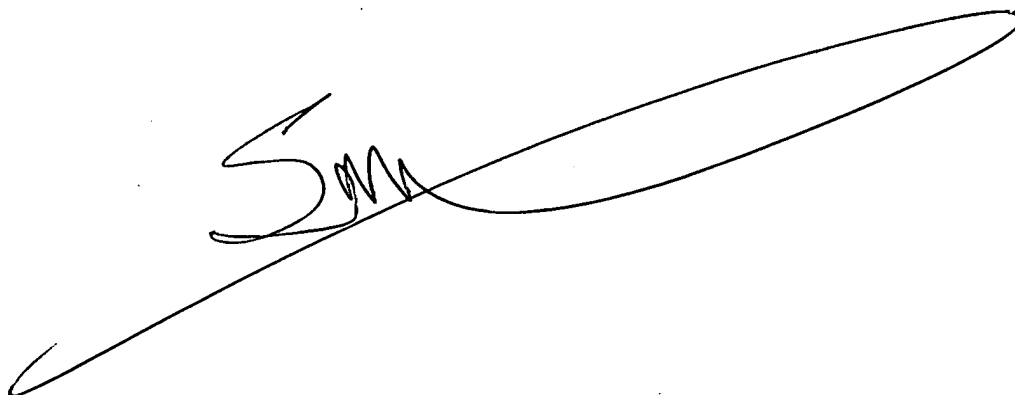
Parker et al. (U.S. patent 5,453,840) for performing image correlation to align sensors.

### **Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604,

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group fax is 703-872-9306, and Tech center 2600 customer service office  
number is 703-306-0377.

A large, stylized handwritten signature in black ink, appearing to read 'Samir', with a long horizontal flourish extending to the right.

**SAMIR AHMED  
PRIMARY EXAMINER**

*AB*

Anand Bhatnagar

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March 5, 2005